



34035US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Edward L. Sughrue II, Bobby G. Cockrell, Glenn W. Dodwell  
and Brent J. Bertus

For: DESULFURIZATION WITH OCTANE ENHANCEMENT

**LETTER**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450



Attached hereto for filing in the United States Patent and Trademark Office is the patent application identified above. This application contains 3 sheet(s) of drawings.

The filing fee has been computed as follows:

Basic Fee	\$750.00
Additional Fees:	
Total Number of claims (whether independent or dependent over 20, times \$18.00	\$810.00
Number of independent claims over 3, times \$84.00	000.00
Multiple Dependent Claims (\$280)	000.00
<b>TOTAL Filing Fee</b>	<b>1560.00</b>

Please charge Deposit Account 16-1575 in the amount of the total filing fee stated above. The Commissioner is hereby authorized to charge any additional fees which may be required under 37 CFR 1.16 or 37 CFR 1.17, or credit any overpayment, to Deposit Account 16-1575, but is not authorized to charge any fee provided for under 37 CFR 1.18.

If the Examiner wishes to contact representatives of record concerning the accompanying application prior to the first Official Action, such contact should be made with the undersigned.

The following items are brought to the Examiner's attention:

U.S. 6,323,384 (Powers et al., Nov. 27, 2001) – Discloses one dimensional, intermediate pore size zeolites for isomerization of linear alkenes to methyl branched alkenes and that activity and selectivity critically depend on the properties of the zeolite. The patent does not disclose or suggest addition of a zeolite to a sulfur-removal process wherein the entire catalyst system can be regenerated and reused.

U.S. 6,274,533 (Khare, Aug. 14, 2001) – Discloses the use of a zeolite as a possible inorganic carrier. The present invention is a patentable improvement over '533 in the recitation of use of a zeolite with a sulfur removal sorbent in a sulfur removal process, wherein the entire catalyst system can be regenerated and reused.

U.S. 6,162,352 (Wu et al., Dec. 19, 2000) – Discloses a catalyst for hydrodesulfurization of gasoline while maintaining octane. The present invention is a patentable improvement in the recitation of use of a zeolite with a sulfur removal sorbent in a sulfur removal process, wherein the entire catalyst system can be regenerated and reused.

U.S. 6,042,719 (Shih, Mar. 28, 2000) – Discloses a dual functional catalyst to remove sulfur and maintain octane. The patent does not disclose or suggest addition of a zeolite to a sulfur-removal process wherein the entire catalyst system can be regenerated and reused.

U.S. 5,378,352 (Degnan et al., Jan. 3, 1995) – Discloses a single stage process to reduce sulfur without affecting octane. There are no experimental examples using mordenite and the patent does not disclose or suggest addition of a zeolite to a sulfur-removal process wherein the entire catalyst system can be regenerated and reused.

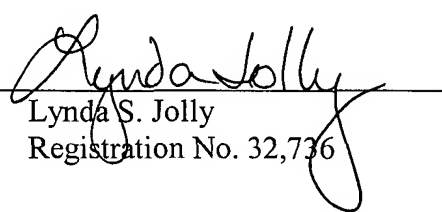
U.S. 4,6784,745 (Nace, Nov. 15, 1988) – Discloses a process to treat fluidized catalytic cracking (FCC) products at low severity over shape-selective zeolites. The patent does not disclose

or suggest addition of a zeolite to a sulfur-removal process wherein the entire catalyst system can be regenerated and reused.

Respectfully submitted,

RICHMOND, HITCHCOCK,  
FISH & DOLLAR

By

  
Lynda S. Jolly  
Registration No. 32,736

RICHMOND, HITCHCOCK  
FISH & DOLLAR  
P.O. Box 2443  
Bartlesville, OK 74005  
1-918-661-0611

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(Date)

**JUN 26 2003**

Lynda S. Jolly

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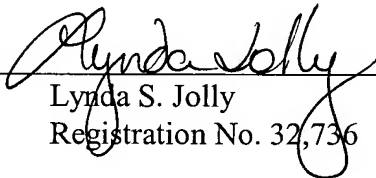
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Sir:

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Service "Express Mail Post Office To Addressee" service under 37 C.F.R. 1.10 on the date indicated  
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RICHMOND, HITCHCOCK,  
FISH & DOLLAR

By   
Lynda S. Jolly  
Registration No. 32,736

RICHMOND, HITCHCOCK,  
FISH & DOLLAR  
P.O. Box 2443  
Bartlesville, Oklahoma 74005  
1-918-661-0611